

- MURRAY, W. D. 1938. Some revisions in the genus *Sphex*, with one new species, a subspecies, and a new name. *Ann. Ent. Soc. America* 31: 17-42.
- . 1951. Sphecinae in: Muesbeck, C. *et al.*, Hymenoptera of America north of Mexico. United States Dept. Agric., Monogr. 2: 971-980.
- RICHARDS, O. W. 1937. Results of the Oxford University Expedition to British Guiana, 1929. Hymenoptera, Sphecidae and Bembecidae. *Trans. Royal Ent. Soc. London* 86: 101-118.
- STEARNS, W. T. 1937. On the dates of publication of Webb and Berthelot's *Histoire Naturelle des Iles Canaries*. *J. Soc. Bibl. Nat. His.* 1 (2): 49-63.
- STRAND, E. 1917. Übersicht der in Gistel's "Achtthundert und zwanzig neue oder unbeschriebene wirbellose Thiere" (1857) behandelten Insekten, *Archiv. für Naturges.* (A) 82 (5): 75-101.
- VAN DER VECHT, J. 1957. In some Hymenoptera from the collection of Guérin-Méneville in the Leiden Museum. *Zool. Meded.* 35: 21-31.

A Flea Named for Michael Grzimek

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High up on the Rim of Ngorongoro Crater, where the road from the south first threatens to fall into this vast pit and where one gets his first breath-taking view of the floor of this gigantic cauldron, which is eleven miles across, there sits a simple monument of native Tanganyika stone beneath which rests as perpetual warden so that the "Serengeti Shall Not Die" the body of young 25 year old Michael Grzimek. Young Michael and his father, who is director of the Frankfurt, Germany, zoo, had, for some years, been studying the migration routes of the tremendous numbers of game animals in the Serengeti and the Ngorongoro of northcentral Tanganyika, East Africa. On the morning of January 10, 1959, an African scout knocked on the door of the research hut of the senior Grzimek, entered and handed the doctor a note from the local game warden. It read: "I am sorry to tell you that Michael has crashed his aeroplane and been killed. He is lying at my house." That afternoon young Grzimek was laid to rest in a position to look forever

over the huge depression which is the Ngorongoro and the vast grass plains to the north which are the Serengeti; in a position to be forever a warden of the keep of these fleet-footed animals which make this their home.

It is not known why this light zebra-striped research plane crashed, for Michael was an experienced pilot, but it is supposed the plane collided with a large bird. Crippled, the plane plummeted to the floor of the Crater, 4,000 feet below the Rim.

During July of 1962 about this monument and for miles around the mouse population had become so large that one had difficulty in not stepping upon mice. A medium sized chocolate brown, tan-bellied mouse taken at the monument carried 7 fleas which were determined as new and shall be called

Ctenophthalmus grzimeki n. sp.

in memory of, as stated on this lonesome Tanganyika monument sentinal,

Michael Grzimek
12.4.1934–10.1.1959

He gave all he possessed for the wild
animals of Africa, including his life.

There are before the writer at this time the holotype male and 3 paratype males, the allotype female and 2 paratype females, all taken off a single specimen of *Lophuromys flavopunctatus aquilus* (True, 1892). Although several hundred other mice of several species were examined from the vicinity none carried this flea so *L. f. aquilus* is designated as type host. The west Rim of Ngorongoro Crater is designated as type locality. The elevation is from 7,500 to 8,000 feet. The collection date is July 22, 1962.

Modified segments: Male. The fingers of *Ctenophthalmus* so far described from Tanganyika are distinct (Fig. 1). In *C. leptodactylus* it is boomerang shaped, in *C. gilliesi* it is apically war club-shaped, in *C. e. wilkesi* rectangular shaped, in *C. p. hopkinsi* tall dome shaped, in *C. c. hemingwayi* thumb shaped. The new species differs from these in that the finger resembles the finger of the American *Orchopeas sexdentatus* group but without the black spiniforms. The writer has usually referred

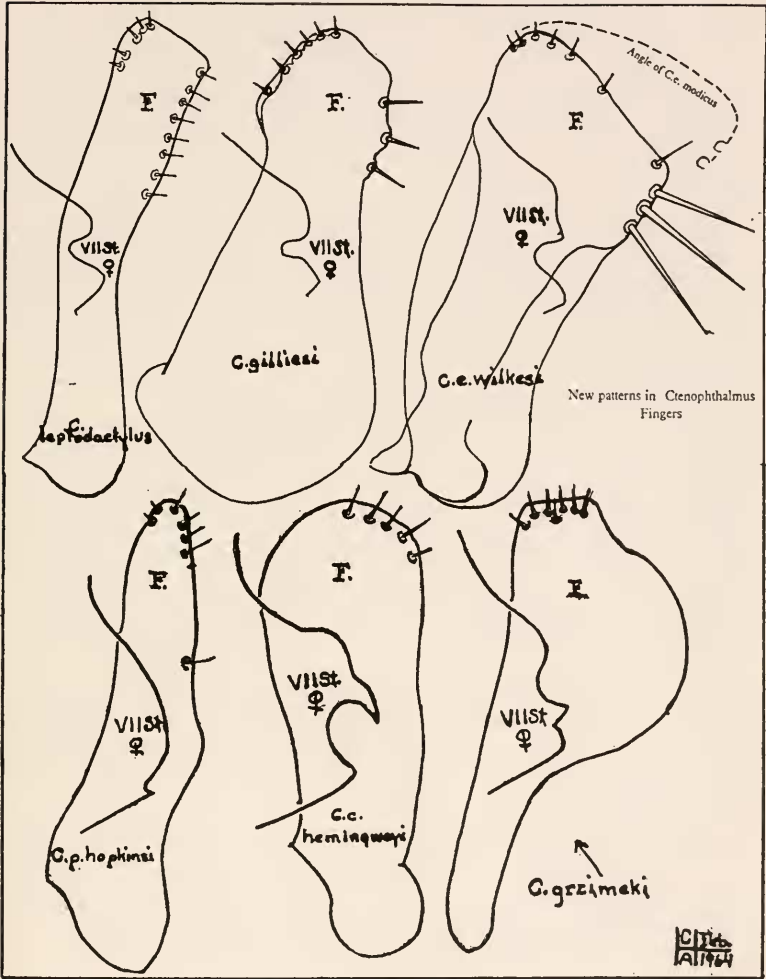


FIG. 1. *Ctenophthalmus leptodactylus* Hubbard, 1963; *C. gilliesi* Hubbard, 1963; *C. evidens wilkesi* Hubbard, 1963; *C. particularis hopkinsi* Hubbard, 1963; *C. cophurus hemingwayi* Hubbard, 1963; and *C. grzimeki* Hubbard, 1964.

to this shape as ham-shaped. At the apex and to the anterior the finger is armed with a few weak bristles. Female. The apical outline of the VII sternite is similar to the *C. cophurus* group but the upper and lower lobes are less prominent. Between the lobes at the midpoint in the valley is a small pointed tip.

Length: A medium sized flea. Male 2.00 mm, female 2.25 mm.

Range: This flea is known only from the type locality.

Deposits: The holotype male and allotype female are deposited in the Tring branch of the British Museum and the first paratypes in the U. S. National Museum. All bear the writer's number T849.

It may be of interest to know that the Michael Grzimek Memorial Laboratory is located at the north end of the Serengeti at Banagi some ten miles north of Seronera Lodge. The buildings at the laboratory are modern and museum-like and there specialists may come and study the natural history of the area. Information regarding the use of this self-contained work shop may be secured through the Director, Tanganyika National Parks, Arusha, Tanganyika, East Africa. Also, it seems to the writer that the easiest route into Banagi is from the west through Musoma on Lake Victoria. The road in from the south, if one can call it a road, is without water or gasoline or help and the 100 miles on beyond Ngorongoro Crater is one sand trap after another in one of which the writer's research truck was fast down to the body for half a day.

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REFERENCES

- GRZIMEK, B. and M. Serengeti shall not die. London, 1960.
HUBBARD, C. A. 1962. Ent. News 73: 225-232.
—, 1963. Ent. News 74: 153-154.
—, 1963. East Afr. Med. Jour. 40 (8): 407-417.
—, 1963. *Ibidem* 40 (9): 452-461.
—, 1963. *Ibidem* 40 (10): 507-511.